

## Self-Efficacy in Eliciting Social Support and Burnout Among Secondary-School Teachers

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A nonrecursive model with relationships between perceived lack of social support, perceived self-efficacy in eliciting support at the workplace, and the 3 successive burnout dimensions—emotional exhaustion, depersonalization, and personal accomplishment—was tested in a sample of 277 secondary-school teachers in The Netherlands. Results showed that teachers' perceived lack of support from colleagues and principals had a significant effect on their self-efficacy beliefs in eliciting support from them, while these self-efficacy beliefs were shown to predict their level of burnout. The hypothesized feedback loop was also confirmed: Teachers' level of burnout predicted the extent to which they feel lack of support. An additional effect of the personal-accomplishment dimension of burnout on perceived self-efficacy was suggested. It was concluded that perceived self-efficacy in eliciting support at the workplace is a usable construct in the prediction of teacher burnout. Future directions in research are suggested.

*Burnout* is described as

a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with other people in some capacity. Emotional exhaustion refers to feelings of being emotionally overextended and depleted of one's emotional resources. Depersonalization refers to a negative, callous, or excessively detached response to other people, who are usually the recipients of one's services or care. (Maslach, 1993, pp. 20-21)

Reduced personal accomplishment is described as "a person's negative self-evaluation in relation to his or her job performance" (Schaufeli, Maslach, & Marek, 1993, p. 17).

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A number of studies have shown that a perceived lack of support from colleagues, offering friendship and help, may be an important element in teacher burnout (Brownell & Pajares, 1997; Burke, Greenglass, & Schwarzer, 1996; Burke, Shearer, & Deszca, 1984; Dignam & West, 1988; Punch & Tuettemann, 1990; Ross, Altmaier, & Russell, 1989; Schwab, Jackson, & Schuler, 1984). Studies also have suggested that teachers who feel that they have supportive principals appear to be less vulnerable to burnout than are their counterparts who feel that they lack these supportive relationships (Bacharach, Bainberger, & Mitchell, 1990; Brissie, Hoover-Dempsey, & Bassler, 1988; Burke & Greenglass, 1989, 1993; Jackson, Schwab, & Schuler, 1986; Kuzsman & Schnall, 1987; Russell, Altmaier, & Van Velzen, 1987; Travers & Cooper, 1993; Zabel & Zabel, 1982).

The present study focuses on the relationship between the emotional support offered by fellow teachers and principals, and teacher burnout. Pines and Aronson (1981) found that professional workers rated emotional support as one of the most important social-support functions. *Emotional support* refers to the degree to which a person's basic emotional need to solve problems at work is gratified through interaction with others (cf. Thoits, 1982). Basic emotional needs include affection, good advice, reassurance, and encouragement. Emotional support is brought about by interactions with others that meet the needs of the receiver. The level of perceived support can be assessed by measuring the discrepancy between a person's need for emotional support and the amount and intensity of the supportive interactions that he or she actually experiences (Van Sonderen, 1991).

The present study hypothesized that teachers' self-efficacy beliefs in eliciting support from colleagues and principals mediate the effect of perceived lack of support on the level of burnout. *Perceived self-efficacy* refers to "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3).

Interpersonal aspects of the work of teachers, such as maintaining classroom order and functioning on the school team, appear to be important predictors of burnout (Brouwers & Tomic, 1998; Byrne, 1991, 1994; Friedman & Farber, 1992; Greenglass, Burke, & Konarski, 1997). When studying teacher burnout, it is therefore highly important to focus on interpersonal domains of functioning in teachers' self-efficacy beliefs.

In this study, teachers' perceived self-efficacy is linked to the domain of eliciting support from colleagues and principals. To assess teachers' perceived self-efficacy in different interpersonal domains of functioning, Brouwers and Tomic (2001) developed the Teacher Interpersonal Self-Efficacy scale. This scale consists of three subscales: Perceived Self-Efficacy in Classroom Management, Perceived Self-Efficacy in Eliciting Support From Colleagues, and Perceived Self-Efficacy in Eliciting Support From Principals. As predicted, based on Bandura's (1986, 1997) assertion that self-efficacy beliefs are linked to specific activities, confirmatory factor analysis showed that the measurement model, in which the items of the

three subscales were allowed to load on the factors concerned, fit the data significantly better than did models in which items of the subscales were allowed to load on one more general perceived self-efficacy factor (Brouwers & Tomic, 2001).

Given the important role that relationships with colleagues and principals play, it is valuable to specify teachers' beliefs about their own efficacy in eliciting support from them (colleagues and principals; Cohen, 1988). In a research review of the negative effect of weak perceived self-efficacy on depression, Kavanagh (1992) emphasized the importance of perceived self-efficacy in eliciting support when he stated that

self-efficacy about mobilizing assistance . . . would appear to be a useful area to begin looking at. . . . Skills in effectively eliciting support and in preserving the sources of support for future crises may turn out to be an important focus for assessment and intervention. (p. 188)

Guglielmi and Tatrow (1998) identified the ability to establish and maintain supportive social networks as one of the individual characteristics in mediating the relationship between stress and illness. The present study examines the indirect route of a perceived lack of collegial and principal support to burnout via teacher perceived self-efficacy in eliciting support, an aspect that has never been studied before. It was conducted among a sample of secondary (vocational) school teachers using questionnaires.

### Hypotheses

Figure 1 shows the hypothetical model that was tested in the present study. First, it is expected that teachers' perceived lack of emotional support from the school team (i.e., principals and colleagues) will have a negative effect on teachers' perceived self-efficacy in eliciting support from them (colleagues and principals). Studies have found that the experienced levels of support from colleagues and principals predicted teachers' beliefs about their own efficacy (Louis, 1998; Raudenbush, Rowan, & Cheong, 1992; Rosenholtz, 1989). Other studies on social support and self-efficacy beliefs give evidence in favor of this hypothesis as well (Cutrona & Troutman, 1986; Duncan & McAuley, 1993; Major et al., 1990).

Second, it is expected that teachers' self-efficacy beliefs in eliciting support from principals and colleagues will have a negative effect on teachers' level of emotional exhaustion. When teachers feel unable to elicit the support needed to cope with the stressors in their work environment, they may get the feeling that they have little or no influence on these stressors (Bandura, 1997).

Third, following the process model of burnout proposed by Leiter and Maslach (1988), it is expected that emotional exhaustion will arise first. Once

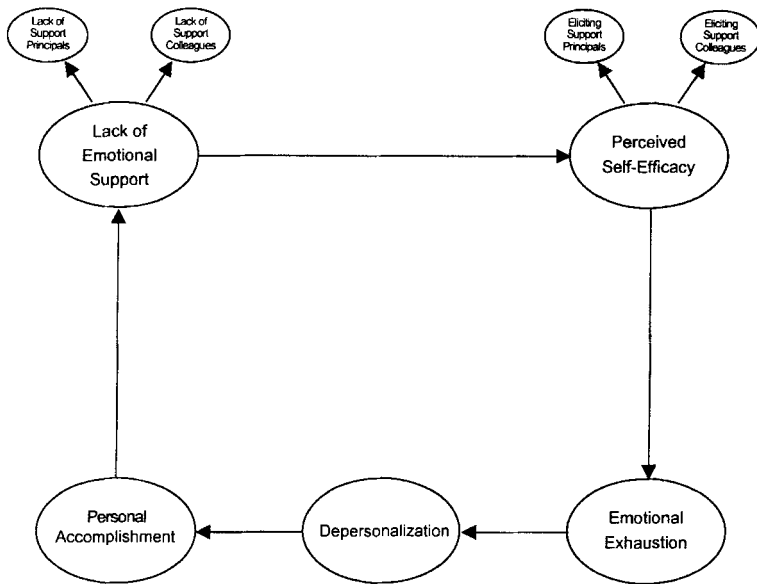


Figure 1. Hypothetical model.

emotional exhaustion occurs, teachers may attempt to cope with it by detaching themselves from the others with whom they work and by developing a cynical, cold, and distant attitude toward them (depersonalization). In turn, depersonalization induces a negative self-evaluation of their own job performance (reduced personal accomplishment). The Leiter and Maslach process model of burnout has been confirmed in both cross-sectional and longitudinal studies (Byrne, 1994; Lee & Ashforth, 1993; Van Dierendonck, Schaufeli, & Sixma, 1994).

Fourth, it was expected that level of teachers' negative attitudes toward the people with whom they work on the one hand and toward their own job performance on the other hand would have an effect on the extent to which teachers experience a lack of support from principals and colleagues. These hypotheses were tested among a sample of secondary (vocational) school teachers in the Netherlands.

## Method

### Participants

Participants in the study were 277 (203 male, 73%; 74 female, 27%) teachers working in secondary (vocational) schools in the province of Limburg in the

Netherlands. Their average age was 45.87 years ( $SD = 8.82$ ), with a range of 21 to 62 years. The average length of teaching experience was 21.28 years ( $SD = 9.74$ ), with a range of 0 to 39 years. In comparison with all teachers working in secondary (vocational) schools in the province of Limburg in 1997 (Agentschap, 1998), the sample of the present study was representative in terms of gender,  $\chi^2(1, N = 277) = 1.38, p = .24$ , but not in terms of age,  $t(df = 276) = -2.96, p = .01$ .

### Measures

**Burnout.** Burnout was measured using the Dutch version of the Maslach Burnout Inventory for teachers (MBI-NL-Ed; Maslach & Jackson, 1981; Schaufeli, Daamen, & Van Mierlo, 1994; Schaufeli & Van Horn, 1995). The questionnaire included 20 items divided into three subscales: Emotional Exhaustion (EE, 8 items), Depersonalization (D, 5 items), and Personal Accomplishment (PA, 7 items). The items were measured on a 7-point Likert scale ranging from 0 (*never*) to 6 (*every day*). Scores on the scales were added separately. High scores on the EE and D scales, and low scores on the PA scale are indicative of burnout (Appendix A).

**Perceived self-efficacy in eliciting support.** Perceived self-efficacy in eliciting support was measured with two subscales of the Teacher Interpersonal Self-Efficacy scale (Brouwers & Tomic, 2001). The Perceived Self-Efficacy in Eliciting Support From Colleagues subscale was used to assess the extent to which teachers feel confident about eliciting support from colleagues, while the Perceived Self-Efficacy in Eliciting Support From Principals subscale was used to assess teachers' self-efficacy belief in eliciting support from principals. Both scales included five items measured on a 6-point Likert scale ranging from 5 (*strongly agree*) to 0 (*strongly disagree*; see Appendix B).

**Perceived lack of emotional support.** Perceived lack of emotional support was measured using six items of the Emotional Support subscale of the Social Support List–Discrepancies (SSL–D; Van Sonderen, 1991). This subscale was used to measure the extent to which teachers feel a discrepancy between their need for supportive interactions with colleagues and principals on the one hand and the amount and intensity of supportive interactions actually offered by colleagues and principals on the other hand. Perceived lack of emotional support was measured separately for colleagues and principals. The items were measured on a 4-point Likert scale with the following response format: 0 = *I miss it, I should like to experience more frequently*; 1 = *I don't really miss it, but it would be nice if it happened a few more times*; 2 = *I wouldn't like it to happen more or fewer times, I think it is exactly sufficient this way*; 3 = *It happens too often, it would be nice if it happened fewer times* (Appendix C). Since none of the participants in the present study scored the category "It happens too often, it would be

nice if it happened fewer times" on one or more items of this scale, it was not necessary to test curvilinear relationships with other measured variables.

### *Procedure*

Principals of randomly selected schools in the province of Limburg in The Netherlands were asked to cooperate in the study. They were mailed questionnaires and asked to hand them out to every teacher in their schools along with a letter explaining the nature and general aim of the study. Follow-up letters were mailed to them about 3 weeks later.

### *Analysis*

Before the fit of the hypothesized structural model could be tested, it was first necessary to determine whether the proposed two-factor measurement models of emotional support and perceived self-efficacy in eliciting support were specified adequately. The two-factor models were tested with confirmatory factor analyses (CFAs) and compared with one-factor models. In the one-factor models, items related to both principals and colleagues were specified to load on one general factor, whereas in the two-factor models, the items related to principals were allowed to load on one factor and the items related to colleagues were allowed to load on the other factor.

The decision-tree framework for sequential chi-square difference tests proposed by Anderson and Gerbing (1988) was followed to determine whether the hypothesized structural model fit the data best. In this framework, a saturated submodel was formulated to determine whether the fit of the hypothetical model could be improved significantly. A saturated submodel is a model in which all parameters relating the constructs to one another are estimated. The best fitting model is the one that (a) does not significantly differ from the saturated submodel, and (b) is the most parsimonious.

The CFAs and the sequential chi-square-difference tests were carried out with the AMOS 3.6 computer program (Arbuckle, 1997) using the maximum likelihood estimation procedure. Evaluations of the models were based on the chi-square likelihood ratio, the root mean square residual (RMR), the Tucker-Lewis Index (TLI; McDonald & March, 1990), and the normed comparative fit index (CFI; Bentler, 1990). To assess TLI and CFI, null models were specified (i.e., models in which the variables are mutually independent). The fit of a model is acceptable when TLI and CFI exceed .90 (Bentler & Bonett, 1980).

## Results

Table 1 presents means, standard deviations, internal consistency measures (Cronbach's alphas), and intercorrelations of the scales. The reliability of the

Table 1

*Means, Standard Deviations, Internal Consistency Measures (Cronbach's  $\alpha$ ), and Intercorrelations of the Scales*

	<i>M</i>	<i>SD</i>	$\alpha$	1	2	3	4	5	6	7
1. Lack of emotional support from principals	7.22	4.04	.95	—						
2. Lack of emotional support from colleagues	9.55	2.77	.89	.58	—					
3. Self-efficacy in eliciting support from principals	16.17	6.02	.94	-.63	-.49	—				
4. Self-efficacy in eliciting support from colleagues	18.61	4.24	.92	-.30	-.52	.56	—			
5. Emotional exhaustion	17.88	8.88	.90	.42	.37	-.38	-.30	—		
6. Depersonalization	6.94	4.24	.71	.28	.33	-.30	-.33	.56	—	
7. Personal accomplishment	26.09	6.23	.85	-.26	-.32	.36	.40	-.35	-.44	—

*Note.*  $N = 277$ . All intercorrelations,  $p < .01$ .

Table 2

*Goodness-of-Fit Indexes of the Measurement Models*

	$\chi^2$	<i>df</i>	<i>P</i>	RMR	TLI	CFI
Perceived lack of emotional support						
Null model	2692.70	66	.000	.24		
One-factor model	713.76	54	.000	.05	.69	.75
Two-factor model	238.16	53	.000	.02	.91	.93
Self-efficacy in eliciting support						
Null model	2519.33	45	.000	.76		
One-factor model	805.05	35	.000	.16	.60	.69
Two-factor model	147.66	34	.000	.05	.94	.95

*Note.*  $N = 277$ ; RMR = root mean square residual; TLI = Tucker-Lewis Index; CFI = Normed Comparative Fit Index.

Table 3

*Goodness-of-Fit Indexes of the Structural Models*

	$\chi^2$	<i>df</i>	<i>P</i>	RMR	TLI	CFI
Null model	9167.20	861	.000	.43	AW	AX
Saturated submodel	1593.94	805	.000	.09	.90	.91
Hypothetical model	1608.67	810	.000	.09	.90	.90
Modified model	1602.07	809	.000	.09	.90	.91

*Note.*  $N = 277$ ; for abbreviations, see Table 2.

scales was .71 or higher, which is adequate according to the criterion of .70 suggested by Nunnally (1978).

Results of the CFAs show that the two-factor models of perceived lack of emotional support as well as perceived self-efficacy in eliciting support were specified adequately. The incremental fit indexes exceeded the criterion of adequate fit of .90. The two-factor models fit the data significantly better than did the one-factor models,  $\Delta\chi^2(1, N = 277) = 475.60, p < .001$ , and  $\Delta\chi^2(1, N = 277) = 657.39, p < .001$ , respectively. This is in accordance with expectations (Table 2).

Table 3 presents the fit indexes of the models. The difference between the hypothetical model and the saturated submodel was significant,  $\Delta\chi^2(5, N = 277) = 14.73, p = .01$ , indicating that the hypothetical model could be improved significantly. Inspection of modification indexes (MI) suggests that the greatest



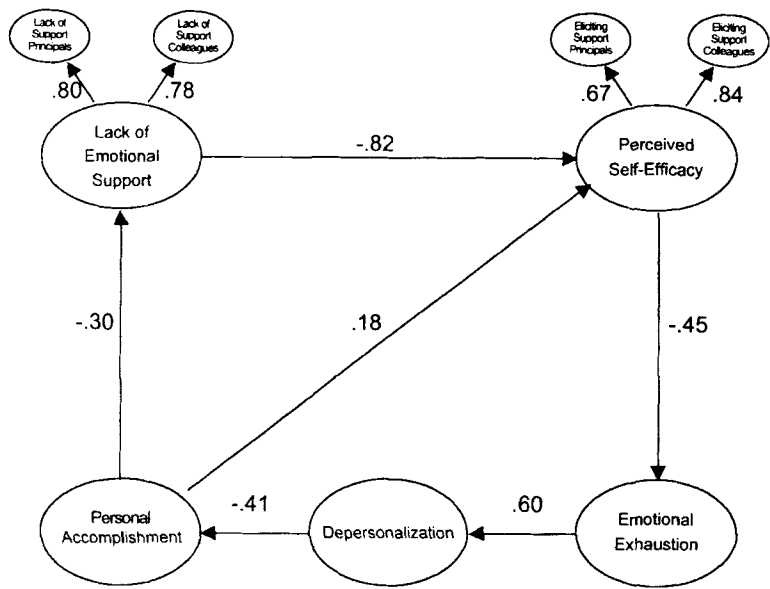


Figure 2. Modified model, standardized solution.

improvement of the model fit could be reached by adding a path to the model from personal accomplishment to perceived self-efficacy. When this path was freed, the model fit improved significantly,  $\Delta\chi^2(1, N = 277) = 6.60, p = .01$ . Since the modified model did not differ significantly from the saturated submodel,  $\Delta\chi^2(1, N = 277) = 8.13, p = .09$ , no improvements could be made. This means that the model fit could not be improved significantly by addition of direct effects of perceived lack of support on emotional exhaustion, perceived lack of support on depersonalization, perceived self-efficacy on depersonalization, or emotional exhaustion on personal accomplishment. The incremental fit indexes of the modified model exceeded the recommended criterion of .90 ( $TLI = .90, CFI = .91$ ), which means that the modified model fit the data well.

Figure 2 shows the so-called standardized solution of the modified model. The path coefficients must be interpreted as standardized regression coefficients. Perceived self-efficacy in eliciting support appears to have mediated the effect of perceived lack of support by colleagues and principals on emotional exhaustion. The three burnout dimensions influenced one another in the predicted way: Emotional exhaustion had a strong effect on depersonalization, which in turn had a moderate effect on personal accomplishment. Emotional exhaustion had no significant direct effect on personal accomplishment. The effects of personal accomplishment on perceived lack of support and perceived self-efficacy in eliciting support were moderate and low, respectively.

### Discussion

This study tested the empirical fit of a nonrecursive model with relationships between perceived lack of emotional support from colleagues and principals, perceived self-efficacy in eliciting support from them, and the three burnout dimensions: emotional exhaustion, depersonalization, and personal accomplishment. Results show that the assumed effects were significant and that an effect of personal accomplishment on perceived self-efficacy must be added to the model.

Perceived lack of emotional support appears to have predicted teachers' level of perceived self-efficacy in eliciting support from the school team. This means that teachers who feel that they lack support from colleagues and principals have less confidence in their capability to elicit support from them than do their counterparts who feel that they receive sufficient support from the school team. Teachers who feel that colleagues and principals often do not give them the support that they need are going to doubt their ability to master the social environment.

Teachers' level of perceived self-efficacy in eliciting support was predicted not only by the extent to which they feel a lack of support, but also by their evaluation of their own job performance, conceptualized as personal accomplishment. This means that teachers who are not satisfied with their job performance may begin to doubt their ability to elicit the necessary support from the school team. An interpretation of this finding is that self-confidence in a more general sense is reduced when teachers' attitude toward their own job performance is negative. When teachers' self-confidence in a more general sense is low, it is conceivable that they will also have difficulty asking a colleague for advice. In a study on perceived self-efficacy in classroom management, Brouwers and Tomic (1998) also found a relationship between personal accomplishment and self-efficacy beliefs. They interpreted this finding in light of self-efficacy theory, which states that enactive mastery experiences are the most influential source of efficacy information (Bandura, 1997). Teachers who, day in and day out, feel that they are not performing well may begin to doubt their own capability to execute the courses of action required to accomplish their job goals. In this view, teachers' accomplishments are a source of information from which they derive their self-efficacy beliefs.

Teachers' perceived self-efficacy in eliciting support from the school team (i.e., colleagues and principals) appears to have predicted the level of teachers' emotional exhaustion. This means that teachers who are in need of support from the school team but who at the same time have little confidence in their ability to elicit such support are more prone to burnout symptoms than are their counterparts who rate their capability as high in this regard. Although the concept of self-efficacy specified for the activity of eliciting support has never been studied

before, the results found can be compared with studies in which self-efficacy in other domains of functioning was found to predict burnout. In a study among a sample of public school teachers, Chwalisz, Altmaier, and Russell (1992) linked self-efficacy beliefs to the domain of dealing with the most stressful event that teachers had experienced on the job during the academic year. They found that teachers who doubted their ability to cope with stressful events reported a higher level of burnout than did their counterparts who showed more self-confidence in this sphere. Since seeking support is one of the coping strategies to handle job stressors, the self-efficacy assessment of Chwalisz et al. encompasses eliciting support from colleagues and principals. Another self-efficacy belief studied in relationship with teacher burnout was linked to managing student behavior (Brouwers & Tomic, 1998). Results of that particular study showed that teachers' belief in their capability to maintain classroom order and discipline was a significant predictor of burnout.

This study has a few limitations. First, it is known that research based on questionnaires is sensitive to self-selection bias. It is therefore possible that teachers who suffer from burnout to some extent do not complete the questionnaires. Since the average scores of the study's participants on the three burnout dimensions (Table 1) were not significantly lower than the scores from the sample used to estimate norm numbers of the MBI for the Dutch teaching population (Schaufeli & Van Horn, 1995; emotional exhaustion,  $M = 16.50$ ,  $SD = 9.84$ ; depersonalization,  $M = 6.00$ ,  $SD = 5.21$ ; personal accomplishment,  $M = 29.87$ ,  $SD = 7.46$ ), it was unlikely that particularly the teachers who suffer from burnout refused to complete the questionnaires distributed in this study.

Second, empirical evidence derived from cross-sectional research cannot give any information about the direction of the relationships between the constructs. The literature on the relationship between social support and self-efficacy beliefs gives evidence in favor of the direction in which a perceived decline of social support precedes a weakening of self-efficacy beliefs (Cutrona & Troutman, 1986; Duncan & McAuley, 1993; Louis, 1998; Major et al., 1990; Raudenbush et al., 1992; Rosenholtz, 1989). The literature, however, also gives evidence in favor of the reverse direction of this relationship; that is, self-efficacy beliefs  $\rightarrow$  perceived social support (Holahan & Holahan, 1987). Longitudinal research is necessary to explore the direction of the relationships between the constructs studied here.

Third, although the hypothetical model was adapted by adding a path between personal accomplishment and perceived self-efficacy, the sample was not large enough to justify splitting it into two halves. It was therefore not possible to cross-validate the adapted model.

The findings of the present study show that the hypothetical nonrecursive model, consisting of effects of perceived lack of emotional support from colleagues and principals on perceived self-efficacy in eliciting support from them

and subsequently on the three burnout dimensions (emotional exhaustion, depersonalization, and personal accomplishment), is empirically sound. The indication that the significant relationships reflected a self-reinforcing cycle shows that the development of a training program to boost teachers' confidence in their ability to elicit support from the school team might be very important for them. It would be desirable to continue the research necessary to reach this result.

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## Appendix A

*Maslach Burnout Inventory**Emotional Exhaustion*

- I feel emotionally drained from my work.
- I feel used up at the end of the workday.
- I feel fatigued when I get up in the morning and have to face another day on the job.
- Working with people all day is really a strain for me.
- I feel burned out from my work.
- I feel frustrated by my job.
- I feel I'm working too hard on my job.
- I feel like I'm at the end of my rope.

*Personal Accomplishment*

- I can easily understand how my students feel about things.
- I deal very effectively with the problems of my students.
- I feel I'm positively influencing other people's lives through my work.
- I can easily create a relaxed atmosphere with my students.
- I feel exhilarated after working closely with my students.
- I have accomplished many worthwhile things in this job.
- In my work, I deal with emotional problems very calmly.

*Depersonalization*

- I feel I treat some students as if they were impersonal "objects."
- I've become more callous toward people since I took this job.
- I worry that this job is hardening me emotionally.
- I don't really care what happens to some students.
- I feel students blame me for some of their problems.



## Appendix B

### *Perceived Self-Efficacy in Eliciting Support From Colleagues Scale*

When it is necessary, I am able to ask a colleague for assistance.

I am able to approach my colleagues if I want to talk about problems at work.

If I feel confronted by a problem with which my colleagues can help me, I am able to approach them about this.

I can always find colleagues with whom I can talk about problems at work.

I am confident that, if necessary, I can ask my colleagues for advice.

### *Perceived Self-Efficacy in Eliciting Support From Principals Scale*

I am confident that, if necessary, I can ask a principal for advice.

When necessary, I am able to bring up problems with principals.

I am able to approach principals if I want to talk about problems at work.

When it is necessary, I am able to get principals to support me.

I am confident that, if necessary, I can get principals to help me.

## Appendix C

*Emotional Support Subscale of the Social Support List—Discrepancies  
(Colleagues)*

that my colleagues back me up  
that my colleagues cheer me up  
that my colleagues gently push me in the proper direction  
that my colleagues give me a good piece of advice  
that my colleagues encourage me  
that my colleagues help me to clarify my problems

*Emotional Support Subscale of the Social Support List—Discrepancies  
(Principals)*

that my principal backs me up  
that my principal cheers me up  
that my principal gently pushes me in the proper direction  
that my principal gives me a good piece of advice  
that my principal encourages me  
that my principal helps me to clarify my problems